

WHAT IS CLAIMED

1. An assembly for interfacing an information device with a host computer unit, comprising a cartridge that is insertable into a cartridge insertion opening of said host computer unit, and is configured to receive and protectively retain an information device for removable electrical and mechanical engagement with an internal electrical connector of said host computer unit that is accessible by way of said cartridge insertion opening of said host computer unit, and an external electrical connector unit that provides external electrical access to said information device.

2. The assembly according to claim 1, wherein said cartridge includes a faceplate having a sealing member that is sized to surround said cartridge insertion opening, so as to become sealed against said host computer unit by insertion of said cartridge into said cartridge insertion opening, and thereby prevent moisture and foreign matter from entering the interior of said host computer unit through said cartridge insertion opening.

3. The assembly according to claim 1, wherein said cartridge has a first portion that is configured to receive and protectively house a first information device for removable electrical and mechanical engagement with said internal electrical connector of

said host computer unit, and a second portion that is configured to receive and protectively house a second information device separate from said first information device.

4. The assembly according to claim 3, wherein said electrical connector unit is configurable to provide external electrical access to said first and second information devices.

5. The assembly according to claim 4, wherein said cartridge has a faceplate that is sealable against an exterior surface of said host computer unit adjacent to said cartridge-insertion opening, and wherein said
5 faceplate includes a first connector that provides external access to said first information device, and a second connector that provides external access to said second information device.

6. The assembly according to claim 3, wherein said second portion is configured to receive and protectively house said second information device for removable electrical and mechanical engagement with an
5 associated internal electrical connector of said host computer unit.

7. The assembly according to claim 1, wherein said cartridge-insertion opening of said computer unit is configured to bring a connector of said information

device retained by said cartridge into aligned
5 engagement with said internal electrical connector of
said host computer unit.

8. The assembly according to claim 7, wherein
said cartridge-insertion opening is configured to
prevent said information device from becoming dislodged
from said cartridge in the course of removal of said
5 cartridge from said host computer unit.

9. The assembly according to claim 7, wherein
said cartridge-insertion opening is configured to
prevent said connector of said information device from
remaining engaged with said internal electrical
5 connector of said host computer unit in the course of
removal of said cartridge from said host computer unit.

10. The assembly according to claim 3, wherein
said first information device comprises a PCMCIA
(Personal Computer Memory Card International
Association) type card and said second information
5 device comprises a memory device.

11. The assembly according to claim 5, wherein
said faceplate further includes a movable element
between said first and second connectors and being
selectively positionable so as to allow an external
5 electrical connection to only one of said first and
second connectors at a time.

12. The assembly according to claim 11, wherein said faceplate and said movable element are configured to provide external optical access to an optical indicator on said first information device.

13. The assembly according to claim 1, wherein said cartridge includes a support surface upon which said information device is supported, and a hold-down spring element, that is configured to be spring-biased
5 against said information device installed on said support surface, so as to mechanically urge said information device against said support surface of said cartridge.

14. The assembly according to claim 13, wherein said cartridge further includes a generally flexible device-retention tang sized to engage said information device as retained on said support surface of said
5 cartridge, and thereby prevent translation of said information device relative to said cartridge.

15. The assembly according to claim 14, wherein said cartridge-insertion opening includes a capture plate configured to engage said retention tang and urge said tang against said information device, in the course
5 of insertion of said cartridge into said cartridge insertion opening that brings said connector of said information device, as retained by said cartridge, into aligned engagement with said internal electrical

connector of said host computer unit and, in the course
10 of removal of said cartridge from said cartridge
insertion opening, to continue to engage said retention
tang and urge said tang against said information device,
until said connector of said information device has
become fully disengaged from said internal electrical
15 connector of said host computer unit.

16. The assembly according to claim 3, wherein
said cartridge includes a frame having a first support
surface upon which said first information device is
removably supported, and a second support surface upon
5 which said second information device is removably
captured so as to be physically and mechanically
isolated from said first information device.

17. The assembly according to claim 1, wherein
said cartridge-insertion opening is configured to
prevent mutual engagement between internal circuit
components of said host computer unit and said cartridge
5 during insertion and removal of said cartridge.

18. A computer interface comprising a cartridge
that is insertable into a cartridge insertion slot of
said computer, and is configured to retain a first
information device, such as PCMCIA type card, at a first
5 portion thereof for engagement with an internal
electrical connector of said computer, and is configured
to retain a second information device, such as a memory

drive, at a second portion thereof, so that said second
information device is mechanically and electrically
10 isolated from said first information device, and wherein
said cartridge is configured to retain said first
information device in a manner that prevents translation
thereof relative to said cartridge during removal of
said cartridge from said computer.

19. An interface for a host computer unit
comprising a cartridge configured to removably retain
and protect a first information device for removable
electrical and mechanical engagement with an internal
5 electrical connector of said host computer unit, and to
removably retain and protect a second information device
in a manner that is physically and mechanically isolated
from said first information device.

20. The interface according to claim 19, wherein
said first and second information devices are selected
from a PCMCIA (Personal Computer Memory Card
International Association) type card and a memory
5 device.

21. The interface according to claim 19, wherein
said cartridge includes an external electrical connector
unit that is configured to provide external electrical
access to only one said first and second information
5 devices at a time.

22. The interface according to claim 19, wherein said host computer unit has a cartridge-insertion slot configured to provide for the insertion of said cartridge therein and bring a connector of said first
5 information device retained by said cartridge into aligned engagement with said internal electrical connector of said host computer unit, while preventing said first information device from becoming dislodged from said cartridge in the course of removal of said
10 cartridge from said host computer unit.

23. The interface according to claim 22, wherein said cartridge includes a first support surface upon which said first information device is retained by a hold-down spring element mechanically urged
5 thereagainst, and a generally flexible retention tang that engages said first information device and prevents translation of said first information device relative to said cartridge.

24. The interface according to claim 23, wherein said cartridge-insertion slot includes a capture plate, that is configured to engage said tang and urge said tang against said first information device in the course
5 of insertion of said cartridge into said cartridge insertion slot that brings said connector of said first information device, as retained by said cartridge, into aligned engagement with said internal electrical connector of said host computer unit and, in the course

10 of removal of said cartridge from said cartridge
insertion slot, to continue to engage said tang and urge
said tang against said first information device, until
said connector of said first information device has
become fully disengaged from said internal electrical
15 connector of said host computer unit.

25. A method for removably coupling an information
device with an internal electrical connector of a host
computer unit, said method comprising the steps of:

- (a) installing said information device on a
5 cartridge that is configured to support said information
device for removable electrical and mechanical
engagement with said internal electrical connector of
said host computer unit, and provides electrical access
to said information device; and
- 10 (b) inserting said cartridge upon which said
information device has been installed in step (a) into a
cartridge-insertion slot of said host computer unit, so
as to bring a connector of said information device as
retained by said cartridge into aligned engagement with
15 said internal electrical connector of said host computer
unit, and engaging said information device in a manner
that prevents said information device from becoming
dislodged from said cartridge in the course of removal
of said cartridge from said host computer unit.

26. The method according to claim 25, wherein said
information device comprises a PCMCIA (Personal Computer

Memory Card International Association) type card.

27. The method according to claim 25, wherein said cartridge includes a hold-down spring element adapted to mechanically retain said information device thereon as inserted in step (a), and a generally flexible retention
5 element that engages said information device and prevents translation of said information device relative to said cartridge during insertion of said cartridge into said cartridge-insertion slot of said host computer unit in step (b).

28. The method according to claim 27, wherein said cartridge-insertion slot includes a capture plate configured to engage said retention element and urge said retention element against said information device,
5 in the course of insertion of said cartridge into said cartridge insertion slot in step (b), so as to bring said connector of said information device, as retained by said cartridge, into aligned engagement with said internal electrical connector of said host computer unit
10 and, in the course of subsequent removal of said cartridge from said cartridge insertion slot, to continue to engage said retention element and urge said retention element against said information device, until said connector of said information device has become
15 fully disengaged from said internal electrical connector of said host computer unit.

29. The method according to claim 25, wherein step
(a) further includes installing a second information
device at a portion of said cartridge that is
mechanically and electrically isolated from said first
5 information device.